

NEWS EFFECTS: GOOD VS. BAD NEWS ON EXCHANGE RATES

Untara, untoro@staff.gunadarma.ac.id, Gunadarma University (Jakarta), Indonesia
Toto Sugiharto, tsharto@staff.gunadarma.ac.id, Gunadarma University (Jakarta), Indonesia
Titi Ayem Lestari, titiayem@staff.gunadarma.ac.id, Gunadarma University (Jakarta), Indonesia

ABSTRACT

Rate of Exchange rate fluctuations are influenced by market sentiments which were formed by the development of economic and noneconomic fundamentals in either domestic economy or worldwide economy, especially various macro economics news from United States of America. Market reacts toward surprises which were generated due to differences between actual data and market expectations (i.e., macro economics news by associated institutions). Market reactions would results in exchange rate corrections, that is either weakening or strengthening, which depends on the magnitude of differences between actual data and market prediction toward the data. This study is aimed for analyzing reactions of exchange rates between Indonesia Rupiah (IDR) and US Dollar (USD) toward macro economics surprises which came either from Indonesia or from the US. Surprises in this study include positive (good) and negative (bad) macro economics news which come from Indonesia and the US as well. Secondary data were used in this research, in the form of daily data exchange rate USD-IDR, and data of macro economic news from within country and from United States between year 1998-2006. Analysis doubled linear regression and Error Correction Model were used in this research. Results of the study indicated that macro economics surprises have significant effect on USD-IDR exchange rate; macro economics surprises from both domestic and the US have significant effect on USD-IDR exchange rate; and neither positive and negative macro economics surprises have significant effect on USD-IDR exchange rate.

KEYWORDS

exchange rates, news, good news, bad news

1. INTRODUCTION

1.1. Background

The development of today's world economy were characterized by increasing economic integration of one country to another. The more rapid development of information and communication technology in the world financial markets, causing the displacement of capital to move more quickly and in a very large number following the economic developments and policies of a country.

Indonesia is included in a small open economy, not apart from the influence of other countries in the global economy, especially large economies and strong countries like the United States, which belongs to the advanced industrial countries that have high levels of high economic growth, strong economy and steady, and supported by technology and productive human resources. Economic fluctuations in the United States, will affect the country with a small open economy such as Indonesia, which will be transmitted to the domestic economy either directly or indirectly.

Since the implementation of the system free floating exchange rate in mid-1997, the exchange rate fluctuations often have very large. Exchange rate fluctuations even far above the fluctuations in currency exchange rates in other countries. In such conditions, maintaining economic stability is not easy. The incident happened economy globally, either directly or indirectly, to give effect to the economy of Indonesia. Global economic conditions are less favorable, especially the increasing world oil prices and monetary policy tightening cycle globally, causing the momentum of efforts to maintain macro economic stability experienced significant disruption. The task of monetary authorities in maintaining the stability of the global economic surprises due to increasingly heavy. Theoretically, the application of free-floating exchange rate, if it surprises the world economy, it can be transmitted directly to the domestic economy. It causes economic conditions become increasingly vulnerable to surprises from the global economy (Jimenez, 2001).

Based on data developments of macroeconomic fundamentals, market participants reacted to various macro economic news is issued by authorized institutions in the direction of such diverse, depending on whether the news source from the United States or from Indonesia. Markets react in the event of surprises arising from the difference between the actual data that macroeconomic news was announced by the relevant authorities with market estimate. Market reaction may cause the strengthening or weakening of the exchange rate USD - Rupiah depending on the type of macroeconomic news is announced and the market estimate of the data. Fluctuations in

exchange rates will stop after a new equilibrium is reached, as long as no new fluctuate in line with economic data will be released by other macro.

On the other hand, the government issued various policies to control the exchange rate, to maintain exchange rate stability in order to provide certainty for business, and in turn can provide stability for the control of the macro economy. Thus, studying the effects of macroeconomic surprises on the exchange rate USD - IDR and the implications become very important.

1.2. Formulation of Research Problems

Fluctuations in exchange rates driven by market sentiment that is formed as a result of various developments in the domestic and world economic developments, particularly the news that comes from the United States. Markets react in the event of surprises arising from the difference between the actual data that macroeconomic news was announced by the relevant authorities with market estimate. Market reaction may cause the strengthening or weakening of the exchange rate USD - IDR depending on the type of macroeconomic news is announced and the market estimate of the data. The main problem of this research is: Does macroeconomic surprises impact on exchange rates USD - IDR?

1.3. Research Objectives

The main purpose of this study is to examine empirically the impact of macroeconomic surprises on the exchange rate USD - IDR. More detailed objectives of this research are:

1. Assessing the effects of American macroeconomic surprises and Indonesian macroeconomic surprises on the exchange rate USD - IDR.
2. Assessing the influence of positive macroeconomic surprises and negative macroeconomic surprises on the exchange rate USD - IDR.

1.4. Research Contributions

Understanding of the market reaction to the news issued by the authority of both the U.S. and Indonesian authorities need to know by Bank Indonesia as the monetary authority is responsible for the stability of the rupiah. This is important because Indonesia is adopted free floating exchange rate system and free floating exchange system has a vulnerability to fluctuations in exchange rates are quite high. Bank Indonesia may provide anticipatory action to more effectively pursued policies in order to maintain the stability of the rupiah, by understanding the market behavior. Foreign exchange market participants can take the decision to buy or sell USD by considering macro-economic surprises of the most influential of the exchange rate USD - IDR. For academics, this research is expected to increase knowledge about information related to exchange rates.

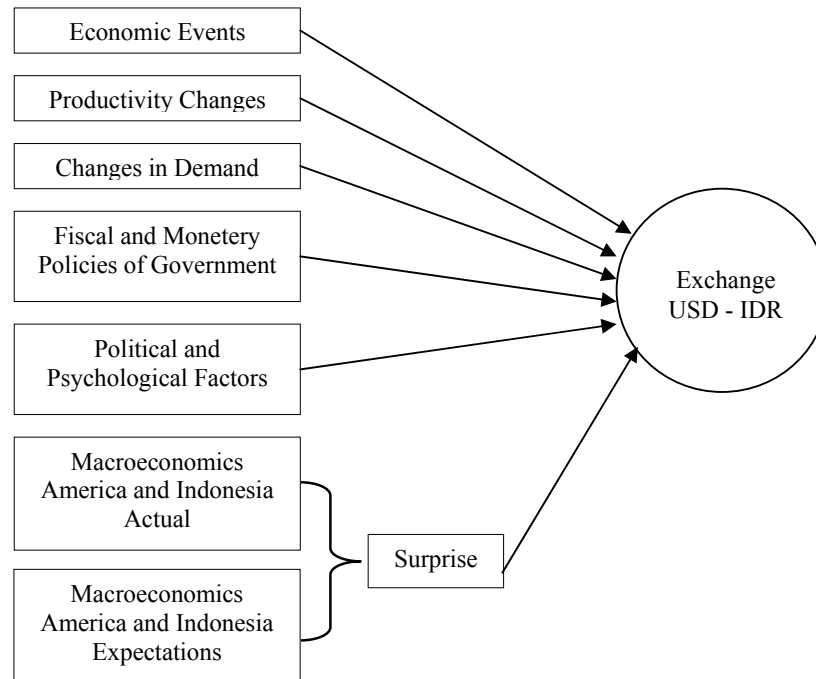
1.5. Thought Framework

In 1970, Eugene Fama developed an approach Efficient Market Hypothesis (EMH). In this approach the determination of exchange rates were associated with the market's ability to enter all the information available (information efficiency). This approach to answering the question "Are forward exchange rates unbiased predictors for future exchange rate?" (Fama, 1970).

With the assumption that markets are efficient, and market expectations about macroeconomic data which will be announced at a position of market expectations at the time announced, so consequently the exchange rate move is a surprise if there is any macro economic news is not anticipated by the market (Galati and Ho, 2001). While the news is not surprising that the market will have no effect on asset prices, because the market automatically consider such information.

Macroeconomic news increase the daily exchange rate movements of the euro against the dollar (Galati and Ho, 2001). News of economic fundamentals significantly affect exchange rates (Ehrmann and Fratzscher, 2004). Announcement macro indicators increased volatility USD and Euro (Laakkonen, 2004). Associated with the authority possessed by the government to determine a set of policies to control the exchange rate, then this study will examine the impact of macroeconomic surprises on exchange rates USD - IDR, and its policy implications. So the framework of this research is described as follows:

Figure 1. Thought Framework



1.6. Hypotheses Development

With the assumption that markets are efficient (able to enter all the information available), and market expectations about macroeconomic data which will be announced at a position of market expectations at the time announced, so consequently the exchange rate moves is when there is a surprise that the economic news macro is not anticipated by the market (Galati and Ho, 2001); (Ehrman and Fratzsher, 2004); (Laakkonen, 2004); and (Untoro, 2005). Therefore, the proposed hypothesis is as follows:

H1: Macroeconomic surprises affect the exchange rates USD - IDR

Nominal Exchange Rate is the relative price of currencies of two countries (Mankiw, 2000). Real Exchange Rate is the nominal exchange rate is corrected by the relative prices of the prices in the country compared to prices abroad, so that exchange rates reflect the relative price of two currencies. Macroeconomic surprises that come from the U.S. and macro-economic surprises originating from Europe have an influence on the movement of the USD / Euro, although the weight of different (Galati and Ho, 2001). Hypothesis to examine the possibility of geographical influence of macro-economic surprises from the U.S. and macro-economic surprises originating from the Indonesian exchange rate movements against the USD - IDR is as follows:

H2: American macroeconomic surprises and Indonesian macroeconomic surprises affect the exchange rate USD - IDR

So far, it is assumed that the positive surprises and negative surprises lead to exchange rate movements are symmetrical, in the sense in the opposite direction but with the same magnitude. Surprises will cause asymmetric effects between countries from which it originated news sources. Inter-region would lead to four possible asymmetric movement through the comparison of positive surprises (good news) and negative surprises (bad news), both originating from the United States or came from Indonesia, so the hypothesis is as follows:

H3: Positive surprises (Good news) and negative surprises (Bad news) affect the exchange rate USD - IDR

2. LITERATURE REVIEW

According to the Efficient Market Hypothesis, all available information should be included in the price of an asset. After the new information, a rational market agents update their beliefs on the value of an asset and the

price moves towards its new equilibrium. The new information really surprised the market, because the current price also includes the development of hope in the future (Fama, 1970). Usually market participants anticipate some or all of the previous changes based on available information and process it before the changes actually happen.

2.1. Exchange Rate

Exchange rate is the price of one country's currency against other currencies. There are 2 types of exchange rates, namely the nominal exchange rate and real exchange rate. Nominal Exchange Rate is the relative price of the two countries currencies (Mankiw, 2000). The real exchange rate is the nominal exchange rate which were corrected by the relative price of prices in the country compared to prices abroad.

Real exchange rate can be calculated using the following formula:

$$Q = S \frac{P}{P^*} \dots\dots\dots (2.1)$$

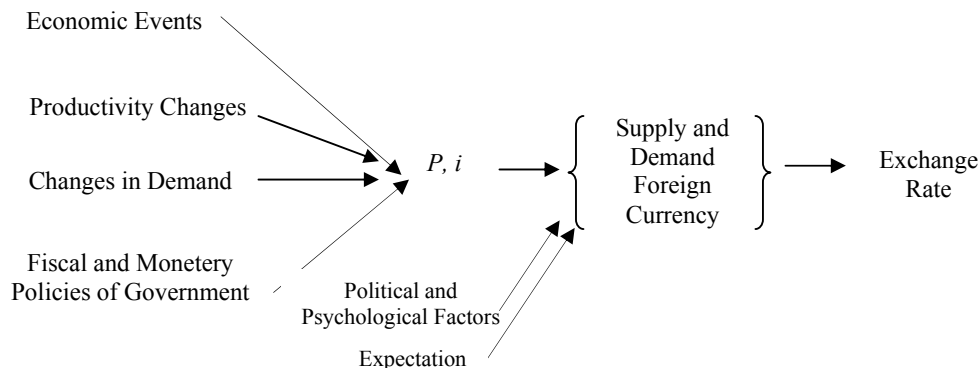
where Q is the real exchange rate, S is the nominal exchange rate, P is the domestic price level and P * is the price level abroad.

2.2. Factors that affect the Exchange Rate Movements

Some factors that influence exchange rate movements, the fundamental factors, technical factors and market sentiment (Madura, 1993). Fundamental factors related to economic indicators such as inflation, interest rates, relative income differences between countries, and market expectations of central bank intervention. Technical factors related to supply and demand conditions of foreign exchange at certain moments. If there is excess demand, while supply remains, then the exchange price will rise and vice versa. More market sentiment caused by rumors or political news that is incidental, whether from domestic or from abroad, which could push up prices or foreign currency fell sharply in the short term. If the rumor or the news was passed, then the exchange rate will return to normal.

In a schematic interconnection of each factor influencing exchange rate movements is described as follows (Levi, 1996):

Figure 2. Factors that affect the Exchange Rate



2.3. The Economics Informations

The Economics Informations learn how information affects an economy and economic decisions. Information has a special characteristic, that is easy to create but difficult to make credible. Easy to spread but have to control. Economic information was also very influenced many decisions. The starting point for economic analysis is the observation of the information that has economic value because it allows individuals to make choices that result in rewards (utility) is higher than choices without information.

Asymmetry of information dealing with the study of decisions in transactions where one party has better information than others. This information asymmetry creates a trade imbalance which can sometimes cause the transaction did not succeed.

There are two approaches developed so far in understanding exchange rate movements in the short-term period. The first approach is as done by Evans and Lyons (2002), which stated exchange rate movements driven

by the demand to make a purchase or a request to conduct the sale as a result of market information. The second approach based on technical approach, which refers to the graph and exchange rate movements are not based on the development of macroeconomic fundamentals. This approach is more fundamentally based on the behavior of market participants (Cheung and Chinn, 1999).

2.4. Definition of Surprise and its alternative measurements

The surprise is the difference in scale macro-economic data announced by the relevant agencies with the amount of macroeconomic data are estimated by market participants. The surprise is measured on the basis of the difference between the actual value of macroeconomic variables with market expectations. Expectations or market estimates are average estimates based on market surveys. Mathematical measurement of surprise macroeconomic news refers to the measurements taken by Ehrmann and Fratzscher (2004) is as follows:

$$(S_{k,t}) = \frac{A_{k,t} - E_{k,t}}{\Omega_k} \dots\dots\dots (2.2)$$

where the components of a surprise ($S_{k,t}$) of the announcement of macroeconomic data k , is the difference between the actual data that was announced ($A_{k,t}$) with market expectations ($E_{k,t}$) divided by the standard deviation (Ω_k).

Positive surprises (good news) is defined as a predictable surprise encourage the strengthening of the domestic currency against foreign currency, while a negative surprise (bad news) is defined as a predictable surprise encourage weakening domestic currency against foreign currency (Ehrmann and Fratzscher, 2004).

2.5. Model Surprise

There are two surprises modeling approaches and test their impact on exchange rates. The first model, the surprises as the innovation time series of macroeconomic variables are relevant. The second approach considers a surprise as the difference between the value of the current macro-economic news and expectations, where expectations are based on survey data.

The first approach uses time series models or regression analysis to obtain the size of the innovation surprises on the interest rate or other macroeconomic variables. Frenkel (1981) predict the impact of news about short-term interest rates on dollar exchange rate / sterling, dollar / French franc and the dollar / Deutsche Mark during the period 1973-1979. He is expected to result in interest rate, using a process otoregresif. The results suggest only weak evidence for the role of the news. The second approach considers a surprise as the difference between the value of the current macro-economic news and expectations, where expectations are based on survey data. By using daily data, Galati and Ho (2001), and then developed by Ehrman and Fratzsher (2004), Laakkonen (2004), and Untoro (2005) using the following models:

$$\Delta(\ln e_t) = \hat{\alpha} + \gamma \Delta(\ln e_{t-1}) + \beta S_t + \delta^M D_{Mon} + \delta^F D_{Fri} + \varepsilon_t \dots\dots\dots (2.3)$$

where e is the spot exchange rate at closing bloomberg, S expressed surprise, while D as a dummy variable, namely dummy Monday and Friday.

2.6. Rational Expectations Theory

Rational Expectations Theory describes hope as the same thing with the best estimate of the future (the optimal forecasting) that uses all the available information. This theory predicted that the outcome was predicted did not differ systematically from the market equilibrium outcome. As a result, rational expectations do not differ systematically or predictive of the results of balance. This theory assumes that people do not make systematic errors when predicting the future, and deviations from perfect foresight just random. In an economic model, this type of modeling to predict that the expected value of a variable; equal to the value predicted by the model, plus a random error of representation of ignorance and error.

If P is the price equilibrium in a simple market, which is determined by demand and supply. Rational expectations theory says that the real price will only deviate from expectations if there is an 'information surprises' caused by the information that can not be predicted at the time of hope formed. In other words, the real price equal to rational expectations:

$$P = P^* + e \dots\dots\dots (2.4)$$

$$E(P) = P^* \dots\dots\dots (2.5)$$

where P^* is rational expectation and e is random error term.

2.7. Previous Study

To support the research, here are some previous studies:

1. Frenkel (1981) investigate the impact of news about short-term interest rates on dollar exchange rate / sterling, dollar / French franc and the dollar / Deutsche Mark during the period 1973-1979. He found weak evidence for the role of the news.
2. Bomhoff and Korteweg (1983) examine the impact of news in the form of money supply, income and oil prices on some of the exchange rate for the period 1973-1979 using quarterly data. They Found evidence that the news is statistically significant in some cases.
3. Mills and Taylor (1989) investigate Influence Plaza Accord in 1985 and 1987 United Kingdom general election against the dollar exchange rate / sterling and mark / sterling using hourly data. Both events affect both the exchange rate.
4. Hogan and Melvin (1994) Proving whether the U.S. Dollar affected by the announcement of U.S. trade balance news. They found U.S. Dollar significantly affected by the announcement of U.S. trade balance news.
5. Almeida et al (1998) examine the influence of fundamental news U.S. and Germany against the dollar exchange rate / mark. These results are News impact significantly on employment in particular exchange rate and trade balance of U.S.
6. Galati and Ho (2001) examine the movement of the euro / dollar due to macroeconomic news in the U.S. and Europe during the period 1999-2000 using daily data. They found Macroeconomic news affects the daily movements of the euro / dollar.
7. Ehrmann and Fratzscher (2004) analyzing the links between economic fundamentals and exchange real-time data examined in the period 1993-2003. U.S. economic news, German, and European influence daily movements of U.S. Dollar – DEM.
8. Laakkonen (2004) investigate the influence of macro indicators of the volatility of U.S. Dollar and Euro. Announcement macro indicators increased volatility of U.S. Dollar and Euro.

These studies mostly investigated the effects of fundamental news to exchange American countries and Europe with a variety of research variables, the model used, the period of observation, and type of data.

This study examined the influence of Macroeconomic surprises of the Exchange Rate USD - IDR using daily data of macroeconomic news the U.S. and Indonesia for the observation period June 1, 1998 until May 31, 2006. Analysis technique used is Error Correction Model.

3. RESEARCH METHOD

This research is a causality, namely research to determine the effect of independent variables (macroeconomic surprises) to the dependent variable-free (exchange rate USD - IDR) by using the Error Correction Model.

3.1. Research Object

Object of this research is macro-economic surprises originating from the United States and Indonesia. Macroeconomic surprises from the U.S. macro economic news and Indonesian macroeconomic news, by comparing actual data with the expectations of each of macroeconomic news.

3.2. Research Variables

This research refers to research models used by Galati and Ho (2001), which was developed by Ehrman and Fratzscher (2004), and Laakkonen (2004), namely:

$$e_t = \hat{e} + \gamma \ln e_{t-1} + \beta S_t + \delta^S D_{Mon} + \delta^J D_{Fri} + \varepsilon_t \dots \dots \dots (3.1)$$

where e is the spot exchange rate at closing briefing, S expressed surprise, and D as dummy variables.

The exchange rate used is the exchange rate USD - IDR daily, so that the dummy variables for Monday and Friday expressed in the model with the intent to capture the effect movement of the season (seasonal) per week. If there is a surprise given the dummy 1 and if there is no surprise given the dummy is 0. Placement exchange

rate movements on the t-1 model is intended to capture market participants anticipate the macroeconomic news announcements.

From the above model, can be formulated a simple model that can show the relationship between exchange rates and macroeconomic surprises are as follows:

$$NT = f (SNFP, SUER, SCPMI, SRS, SCPI, SPPI, SPFI, SIP, SGDP, SCCI, SHS, STB, SICL, SDO, SNHS, SM1, SM2, SCPII, SWPI, SGDPI, SSBI, SEX, SIM, SPE, SPSM) \dots\dots\dots (3.2)$$

where:

NT = exchange erate USD-IDR, S = Surprise for every news

1.1. Data Collection Method

This study uses secondary data in the pattern of time series, which is divided into two groups of data, exchange rate USD - IDR and macroeconomic news data. Data exchange rate USD - IDR obtained from Oanda (<http://www.oanda.com>). Macroeconomic news data that is used in the form of actual data and estimated data from market participants. Macroeconomic news data comes from the U.S. and Indonesia. Macroeconomic news data from the U.S., referring to the fundamentals of data that has been used by several researchers including Ehrmann and Fratzscher (2004), Galati and Ho (2001) and Helinä Laakkonen (2004), taking into account the availability of the data obtained from the Briefing (www.briefing.com). Indonesia's economic news data used is data that has been announced by Ceicdata (www.ceicdata.com), Bank Indonesia (www.bi.go.id), and Consensus (www.consensus.com) To test the data that has been announced it, then do cross check the data by comparing data with similar data taken from the data source Advanced Currency Market (www.ac-market.com).

Data collected in the form of daily data, starting on June 1, 1998 to May 31, 2006. Observation period was chosen because at that period the system applies the same exchange rate is free floating system (free floating).

1.2. Analysis Method

The method of analysis used in this study is the Error Correction Model (Error Correction Model) that is to see the effects of independent variables on the dependent variable in both the short and long term. Based on theories and hypotheses proposed, Surprise (S) from each of the macroeconomic news affect exchange rate (e) so that the model used is as shown in equation (3.1) above. Estimation model used in this study is Two Steps Engel - Granger error correction model (ECM). ECM model derived from equation (3.1.) above are as follows:

$$DL(e_t) = \pi_0 + \pi_1 DL(\ln e_{t-1}) + \pi_2 DLS_t + \pi_3 DL\delta^S D_{Mon} + \pi_4 DL\delta^J D_{Fri} + \pi_5 KK_{t-1} + \varepsilon_t \dots\dots\dots (3.3)$$

where KKt-1 is a correction of an error (residual lag 1) of the initial equation.

1.3. Model

To test the main hypothesis Surprise macroeconomic impact on exchange rates USD - IDR to use the model as used by Galati and Ho (2001), further developed by Ehrman and Fratzscher (2004), and (Laakkonen, 2004) as shown in equation (3.1) above. The model is modified and adapted to the hypothesis to be tested. Details of the two other hypotheses and models used for testing are as follows:

1. American macroeconomic surprises and Indonesian macroeconomic surprises affect the exchange rate USD - IDR

model used is :

$$e_t = \hat{\sigma} + \gamma \ln e_{t-1} + \beta D^{US} + \gamma D^{IND} + \delta^S D_{Mon} + \delta^J D_{Fri} + \varepsilon_t \dots\dots\dots (3.4)$$

where D is a dummy Surprise. Surprise dummy in determining whether originating from America and from Indonesia, then set the value of 'positive 1' as they are positive Surprise (encourage the strengthening of rupiah currency against USD), and the value of 'negative 1' as a negative Surprise (push attenuation values Rupiah exchange rate against USD) and the value of 'zero' when not happen Surprise.

2. Positive surprises (Good news) and Negative surprises (Bad news) affect the exchange rate USD - IDR

model used is :

$$e_t = \partial + \gamma \ln e_{t-1} + \beta^G D^{USG} + \beta^B D^{USB} + \gamma^G D^{INDG} + \gamma^B D^{INDB} + \delta^S D_{Mon} + \delta^J D_{Fri} + \varepsilon_t \dots \dots \dots (3.5)$$

where G states Good (positif) and B states Bad (negatif).

4. RESULT

In accordance with the proposed hypothesis, the hypothesis testing is performed include the following:

4.1. The influence of macroeconomic surprise againsts the exchange rate USD – IDR

The results of the analysis and significance are as follows:

Table 1.1. The influence of macroeconomic surprises againsts the exchange rate USD – IDR

Variable	Coeffisien	SE	t-Stat.	t-Critical	Prob.	Sign.
US:						
LOG(KURS(-1))	-251.1365	616.0372	-0.407664	1.64	0.6836	Not Sign.
SNFP	-1.180957	1.811255	-0.652010	1.64	0.5145	Not Sign.
SUER	11.31290	68.20817	0.165858	1.64	0.8683	Not Sign.
SCPMI	-2.411368	1.965017	-1.227149	1.64	0.2199	Not Sign.
SRS	0.651165	17.59836	0.037001	1.64	0.9705	Not Sign.
SCPI	-86.60791	65.57603	-1.320725	1.64	0.1867	Not Sign.
SPPI	3.075972	20.36359	0.151053	1.64	0.8799	Not Sign.
SPFI	-1.045232	1.061215	-0.984939	1.64	0.3248	Not Sign.
SIP	16.47498	29.29676	0.562348	1.64	0.5739	Not Sign.
SGDP	5.394657	15.02221	0.359112	1.64	0.7195	Not Sign.
SCCI	1.556607	1.742414	0.893362	1.64	0.3718	Not Sign.
SHS	-0.067914	0.091003	-0.746286	1.64	0.4556	Not Sign.
STB	-1.573460	3.360640	-0.468203	1.64	0.6397	Not Sign.
SIC	-1.685550	2.095306	-0.804441	1.64	0.4212	Not Sign.
SDO	2.361639	2.736078	0.863147	1.64	0.3882	Not Sign.
SNHS	-1.088383	1.900800	-0.572592	1.64	0.5670	Not Sign.
Indonesia:						
SM1	12.67549	5.694379	2.225964	1.64	0.0261	Sign.
SM2	-11.06880	5.536434	-1.999264	1.64	0.0457	Sign.
SCPII	0.955799	3.241112	0.294899	1.64	0.7681	Not Sign.
SWPII	-3.239702	3.265563	-0.992080	1.64	0.3213	Not Sign.
SGDPI	-15.63570	5.853572	-2.671138	1.64	0.0076	Sign.
SSBI	0.681143	4.776985	0.142588	1.64	0.8866	Not Sign.
SEX	-10.16774	6.001228	-1.694277	1.64	0.0904	Sign.
SIM	8.370084	5.847843	1.431311	1.64	0.1525	Not Sign.
SPE	0.435526	1.877324	0.231993	1.64	0.8166	Not Sign.
SPSM	-0.018322	0.111979	-0.163616	1.64	0.8700	Not Sign.

Testing the influence of macro-economic Surprise of the exchange rate USD - IDR at the same time shows that the macroeconomic Surprise significantly affect the exchange rate USD - IDR. This can be explained by the theory of rational expectations. Rational expectations theory says that the real price will only deviate from expectations if there is a 'Surprise information' caused by the information that can not be predicted at the time of hope formed. In this case the market can not predict the Surprise, both in the time of the publication and its magnitude, and therefore could not rationally take into account such information in making his decision, despite the macro economic news today is already published on a regular basis by several companies to providers of data sources, as bloomberg.com, briefing.com, ac-market.com, and so on.

There are partially independent variables have a significant effect of M1, M2, Indonesia's GDP, and exports. This means that M1, M2, Indonesia's GDP, and exports significantly affect the USD-IDR, so the government should consider the moment of the announcement of macroeconomic data to maintain the credibility and effectiveness of various monetary and fiscal policies are issued to control the movement of the exchange rate USD-IDR.

Regression results of 11,331.21 constant, this means that the exchange rate USD-IDR, if no aanya calculated variables, are in the range of Rp. 11,331.21. In terms of the variable coefficients, there are 12 coefficients of variables that are not in accordance with economic intuition, respectively, are: Exchange rate (-1), SNFP, SCPMI, SHS, STB, SICL, SNHS, SM2, SWPI, SGDPI, SEX, and SPSM.

4.2. The influence of American macroeconomic surprise and Indonesian macroeconomic surprise against the exchange rate USD - IDR

The results of the analysis and significance are as follows:

Table 1.2. The influence of American macroeconomic surprise and Indonesian macroeconomic surprise against exchange rate USD – IDR

Surprises Source	Coefisien	SE	F-Stat	F-Critic	Significance
Surprise from America	-78445.77	325.8301	1707.904	1.00	Sign.
Surprise from Indonesia	-78589.31	322.9168	2905.850	1.00	Sign.

U.S. macroeconomic Surprise significantly affect the exchange rate USD - IDR. Similarly, Indonesian macroeconomic Surprise significantly affect the exchange rate USD - IDR. This can be explained that in this analysis of economic information applies. Observations on information that has economic value, allowing individuals to make choices that result in rewards or use value is higher than they would get from choices without information. As a result the development of information technology so fast. The development of this technology could enable the market to obtain information quickly, so they can make good decisions without constrained by geographical asymmetry, but because of the many types of Surprise, and many companies make the data source provider of market participants a choice difficult.

Surprise from U.S. macro economy has a negative coefficient, this indicates that the presence of positive Surprise in the United States associated with a weakening exchange rate USD-IDR, and vice versa, this is consistent predictions of economic intuition.

Surprise of the Indonesian macro economy has a negative coefficient, this indicates that the existence of positive Surprise in Indonesia is associated with a weakening exchange rate USD-IDR, and vice versa, this is contrary to predictions of economic intuition that positive berkoeffisien.

Dummy variables partially CPI of America on Friday and Monday dummy variable of Indonesia's GDP is significantly affected. This indicates that the market behavior is influenced by the movement of the season effect (seasonal) per week.

4.3. The influence of positive macroeconomic surprise (good news) and negative macroeconomic Surprise (Bad news) against the exchange rate USD – IDR

The results of the analysis and significance are as follows:

Table 1.3. The influence of positive macroeconomic surprise (good news) and negative macroeconomic surprise (bad news) against the exchange rate USD – IDR

Surprises	Coefisien	SE	F-Stat	F-Critic	Significance
Good News America	-78555.37	326.7718	1278.598	1.00	Sign.
Bad News America	-78589.32	326.7513	1256.799	1.00	Sign.
Good News Indonesia	-78608.39	326.6591	1409.540	1.00	Sign.
Bad News Indonesia	-78644.36	327.3254	1408.388	1.00	Sign.

Good news America, Bad news America, Good news Indonesia, and Bad news Indonesia significantly affect the exchange rate USD - IDR. This can be explained that based on rational expectations theory, that the real

price will only deviate from expectations, if there is a 'surprise information' caused by information that can not be predicted at the time of established expectations. Surprise in this case a positive (good news) is predicted to encourage the strengthening exchange rate USD - IDR, and Surprise negative (bad news) are predicted to encourage the weakening exchange rate USD - IDR, can not be predicted well by the market and not take into account the information in a rational in making his decision. Good news or bad news that can not be predicted by the market, coupled asymmetric information contained in it (geographically asymmetric in this case), will cause a change in the output so that the market will be vying to get the information as complete and as soon as possible.

Good news United States have a negative coefficient, this indicates that the existence of good news US are associated with a weakening of the exchange rate USD-IDR, and vice versa, this is consistent with the predictions of economic intuition. Bad news Americans have negative coefficient, this indicates that the existence of bad news US are associated with a weakening of the exchange rate USD-IDR, and vice versa, this is contrary to predictions of economic intuition. Good news Indonesia has a negative coefficient, this indicates that the existence of good news Indonesia are associated with the weakening of the exchange rate USD-IDR, and vice versa, this is contrary to predictions of economic intuition. Bad news Indonesia has a negative coefficient, this indicates that the presence of bad news Indonesia are associated with the weakening of the exchange rate USD-IDR, and vice versa, this is consistent with the predictions of economic intuition.

5. CONCLUSION AND FUTHER RESEARCH

5.1. Conclusion

Fluctuations in exchange rates driven by market sentiment that is formed as a result of various developments in the domestic and world economic developments, particularly the news that comes from the United States. Markets react in the event of surprises arising from the difference between the actual data that macroeconomic news was announced by the relevant authorities with market estimate. Market reaction may cause the strengthening or weakening of the exchange rate USD - IDR depending on the type of macroeconomic news is announced and the market estimate of the data. In this study concluded that the impact of macroeconomic surprises in real exchange rate against USD - IDR. This can be explained that the market can not predict such surprises, both in the time of the publication and its magnitude, and not taking into account such information in making rational decisions. Macro-economic news today is already published on a regular basis by several companies to providers of data sources, but each company typically provides data that are quite different expectations depending on the results of surveys they do. There are partially independent variables have a significant effect of surprises M1, M2 Indonesia's GDP, and exports. This means that M1, M2, Indonesia's GDP, and exports significantly affect the USD-IDR, so the government should consider the moment of the announcement of macroeconomic data to maintain the credibility and effectiveness of various monetary and fiscal policies are issued to control the movement of the exchange rate USD-IDR.

U.S. macroeconomic surprises significantly affect the exchange rate USD - IDR. Similarly, Indonesian macroeconomic surprises significantly affect the exchange rate USD - IDR. This can be explained that the development of information technology is allowing the market to obtain information quickly, so they can make good decisions without constrained by geographical asymmetry, but because of the many types of macroeconomic news is there, and the number of data source provider, the market demand have the information as much as possible.

Good news America, Bad news America, Good news Indonesia, and Bad news Indonesia significantly affect the exchange rate USD - IDR, because a good news or bad news (in this case contained geographic asymmetric) can not be predicted well by the timelines and its magnitude.

5.2. Suggestions for Further Research

This study uses macro economic news is relatively popular routinely published by the agencies in charge, so that research on other macro economic news is relatively unpopular require further research.

Further research using macro economic news is shorter than one day (intraday) needs to be done because of fluctuations in the exchange rate USD-IDR could occur at any time, while the new study uses macroeconomic news daily.

This study uses macroeconomic news daily, so that good news and bad news occur in isolation, have different effects on the exchange rate compared concurrent surprises. Further research is expected to use the macroeconomic news is shorter than one day (intraday), because it allows the positive and negative surprises that occur simultaneously.

REFERENCES

- Almeida, Alvaro, Charles Goodhart and Richard Payne. 1998. "The effect of macroeconomic "news" on high frequency exchange rate behaviour". *Journal of Financial and Quantitative Analysis*. 33, pp 1-47.
- Andersen, T., Bollerslev, T., Diebold, F. and C. Vega. 2003. "Micro Effects of Macro Announcements: Real-Time Price Discovery in Foreign Exchange". *American Economic Review* 39 (1): 38-62.
- BIS. 2005. "Foreign exchange market intervention in emerging markets: motives, techniques and implications". *BIS Papers No. 24*, Monetary and Economics Department.
- Bomhoff, Edward J. and Pieter Korteweg. 1983. "Exchange rate variability and monetary policy under rational expectations: some Euro-americans experiences 1973-79". *Journal of Monetary Economics*. Vol. 11. pp. 169-206.
- Campbell, J. and L. Hentschel. 1992. "No News is Good News: An Asymmetric Model of Changing Volatility in Stock Returns". *Journal of Financial Economics* 31: 281-318.
- Cheung, Yin-Wong and Chinn, Menzie David. 2001. "Currency Traders and Exchange Rate Dynamics: A Survey of the U.S. Market". *Journal of International Money and Finance*. 20(4), pp. 439-71.
- Copeland, Laurence. 1984. "The pound sterling-US Dollar exchange rates and the 'news'". *Economics Letters*. No. 15. pp 109-113.
- Dornbusch, Radiger, Stanley Fischer, and Richard Startz. 1998. *Macroeconomics*. 7th Edition. International Edition. the McGraw-Hill Companies.
- Ederington, Louis H. and Jae Ha Lee. 2001. "Intraday Volatility in Interest-Rate and Foreign-Exchange Markets: ARCH, Announcement, and Seasonality Effects". *Journal of Futures Markets* 21. 517-552.
- Ehrmann Michael and Fratzscher Marcel. 2004. "Exchange Rates and Fundamentals :New Evidence from Real Time Data" European Central Bank. Working Paper Series No. 365.
- Engel, Charles, and Jeffrey Frankel. 1984. "Why Interest rates react to money announcement: an explanation from the foreign exchange market". *Journal of Monetary Economics*. 13, pp 31-9.
- Evans, M., and R. Lyons. 2002a. "Order flow and exchange rate dynamics, *Journal of Political Economy*, 110: 170-180.
- Fama, Eugene. 1970. "Efficient Capital Market: A Review of Theory and Empirical Work". *Journal of Finance*. 25, p 383-417
- Faust, Jon; John H. Rogers; Shing-Yi B. Wang; and, Jonathan H. Wright. 2005. "The High Frequency Response of Exchange Rates and Interest Rates to Macroeconomic Announcements". *Journal of Monetary Economics*. forthcoming.
- Fleming, Michael J., and Eli M. Remolona, 1999a. "The Term Structure of Announcement Effects". *BIS Working Paper No. 71* (Basel: Bank of International Settlement).
- Frenkel, Jacob. 1981. "Flexible exchange rates, prices, and the role of news: Lesson from the 1970s". *Journal of Political Economy*. 189(4). pp 665-705.
- Galati Gabriele and Ho Corrinne. 2001. "Macroeconomic news and the euro/dollar exchange rate". *BIS Working Papers No 105*. Monetary and Economic Department.
- Goodhart, C., Hall, S., Henry S. and B. Pesaran. 1993. "News Effects in a High-Frequency Model of the Sterling-Dollar Exchange Rate". *Journal of Applied Econometrics* 7: 199-211.
- Hair, Joseph F., Anderson, Rolph E., dan Tatham, Ronald L. 1990. *Multivariate Data Analysis*. MacMillan Publishing Company, New York.
- Hakkio, Craig and David Pearce. 1985. "The Reaction of exchange rate to economics news". *Economic Inquiry*, 23. pp 627-35.
- Hanish C. Lodhia. 2005. *The Irrationality of Rational Expectations - An Exploration into Economic Fallacy*. 1st Edition, Warwick University Press, UK.
- Hogan, K., Melvin, M. and Roberts, D. J. 1991. "Trade balance news and exchange rates: is there a policy signal?" *Journal of International Money and Finance*. 10. s90- s99.
- Jimenez, J.F. 2001. "Business Cycles in Small Open Economies : The Case of Costa Rica". *Working Paper No. 330*.
- [John F. Muth](#) . 1992. *Rational Expectations and the Theory of Price Movements*. reprinted in The new classical macroeconomics. Volume 1.
- Jon Faust, John H. Rogers, Shing-Yi B. Wang and Jonathan H. Wright. 2003. "The High Frequency Response of Exchange Rates and Interest Rates to Macroeconomic Announcements". *International Finance Division*, Board of Governors of the Federal Reserve System, Washington DC 20551.
- Julailah, Umi dan Insukindro. 2004. "Analisis Dampak Kebijakan Moneter terhadap Variabel Makroekonomi di Indonesia Tahun 1983.1 - 2003.2.". *Buletin Ekonomi Moneter dan Perbankan*.
- Karfakis, C. and Kim. S.-J. 1995. "Exchange rates, interest rates and current account news: some evidence from Australia", *The Journal of International Money and Finance*, 14, 255-77.
- Kim, Suk-Joong, Michael D. McKenzie, and Robert W. Faff. 2004. "Macroeconomic News Announcements and the Role of Expectations: Evidence for U.S. Bond, Stock, and Foreign Exchange Markets". *Journal of Multinational Financial Management*, Vol. 14, pp. 217-32.
- Kliesen, Kevin L. and Schmid, Frank A. 2006. "Macroeconomic News and Real Interest Rates?". *Federal Reserve Bank of St. Louis Review*. March/April 2006. 88(2), pp. 133-43.

- Kuncoro dan Inayah. 2002. "Adakah Pengaruh Pernyataan Gus Dur Terhadap Perilaku Kurs Rp/US\$, 1 Januari 1999 – 30 April 2002?: Studi Empiris dengan Metode Box-Jenkins (ARIMA)".
- Laakkonen Helinä. 2004. "The impact of macroeconomic news on exchange rate volatility". *Bank of Finland Discussion Papers* 24. 2004, Research Department.
- Levi, Maurice D. 1996. *International Finance: The Market and Financial Management of Multinational Business*. 3rd edition, Mc Graw-Hill Int'l Editions. Singapore.
- Li, Li, and Zulu F. Hu, 1998. "Responses of the Stock Market to Macroeconomics Announcements Across Economic States". *IMF Working Paper* 98/79 (Washington: International Monetary Fund).
- Madura, Jeff. 1997. *Manajemen Keuangan Internasional*. Edisi Keempat. Jakarta: Erlangga.
- MacDonald, Ronald and Thomas S Torrance. 1988. "Exchange rates and the News: Some Evidence using UK Survey Data". *The Manchester School*. No. 56. pp 69-76.
- Malkiel, Burton G. 2003. "The Efficient Market Hypothesis and Its Critics". *CEPS Working Paper*. No. 91. Princeton University.
- Mankiw, N. G. 2000. *Teori Makroekonomi*. Edisi Keempat. Erlangga, Jakarta.
- Melvin, M. and Yin, X. 2000. "Public Information Arrival, Exchange Rate Volatility and Quote Frequency". *The Economic Journal*, vol. 110, pp. 644-661
- Mishin, Frederic S. 1995. *The Economics of Money, Banking, and Financial Marketing*. 4th edition, Harper Collin Colleger Publisher, Columbia University.
- Oberlechner, T. and Hocking, S., 2003. "Information sources, news, and rumors in financial markets: Insights into the foreign exchange market". *Journal of Economic Psychology*. In Press.
- Parkin, Michael, dan Robin Bade. 1995. *Modern Macroeconomics*. Fourth Edition, Prentice Hall Canada Inc., Scarborough. Ontario
- Phylaktis, Kate and Chen, Long. 2005. "Macroeconomic Announcements and Private Information in the Foreign Exchange Market". *Cass Business School London*.
- Sarwono, Hartadi A. dan Perry Warjiyo. 1998. "Mencari Paradigma Baru Manajemen Moneter dalam Sistem Nilai Tukar Fleksibel: Suatu Pemikiran untuk Penerapannya di Indonesia". *Buletin Ekonomi Moneter dan Perbankan*., Vol. 1. No. 1. Juli. hal. 5-23.
- Stockman, Alan 1980. "A Theory of Exchange Rate Determination". *Journal of Political Economy* 88: 673-698.
- Tandon, Kishore, and Thomas Ulrich. 1987. "International Market Response to Announcements of United States Macroeconomic Data". *Journal of International Money and Fund*. Vol. 6, No. 1. pp. 71-83.
- Untoro. 2005. "Pengaruh "Kejutan" dari Berita Makroekonomi terhadap Pergerakan Nilai Tukar Rupiah". *Buletin Ekonomi Moneter dan Perbankan*.
- Warjiyo, P. 2004. "Mekanisme Transmisi Kebijakan Moneter di Indonesia: Pelaksanaan Kebijakan Moneter Penargetan Inflasi di Indonesia". *Bank Indonesia Seri Kebanksentralan* No.11.
- Winarno, Wing Wahyu. 2007. *Analisis Ekonometrika dan Statistika dengan Eviews*. UPP STIM YKPN-YOGYAKARTA, Yogyakarta.